CLAIMS

1. A heavy duty pneumatic tire comprising a carcass layer, an innerliner layer and an inner face protection layer arranged therebetween, characterized in that the inner face protection layer is comprised of a rubber layer A adjacent to the innerliner layer and a rubber layer B adjacent to the carcass layer, and each of rubber layers constituting the innerliner layer, the carcass layer, the rubber layer A and the rubber layer B is compounded with a rubber component, sulfur and a cobalt compound of an organic acid, and an amount of sulfur compounded satisfies the following equations (I) and (II):

$$S_A < S_B \leq S_C \quad \cdots\cdots \text{(I)}$$

$$2 \leq S_A \leq 4 \quad \cdots\cdots \text{(II)}$$

(wherein S_A, S_B and S_C are an amount of sulfur compounded in a rubber composition constituting the rubber layer A, rubber layer B and the carcass layer, respectively, based on 100 parts by mass of the rubber component).

2. A heavy duty pneumatic tire according to claim 1, wherein S_B is not less than 4.

3. A heavy duty pneumatic tire according to claim 1, wherein an elongation at break of the rubber composition constituting the rubber layer A is 1.00-1.45 times an elongation at break of the rubber composition constituting the rubber layer B.